





- **For a Technology Demonstration of Deep-space Optical Communications (DSOC) use of existing ground telescopes are planned**
  - Hale Telescope and Palomar Mountain, CA as the receiving telescope
  - Optical Communication Telescope Laboratory (OCTL) at Table Mountain (near Wrightwood, CA) as the uplink beacon transmitting telescope
- **In order to operate a link, therefore, a simultaneous cloud-free line-of-sight (CLFOS) to both sites is needed**
  - Joint CFLOS availability was measured using Geostationary satellite data by Northrop Grumman Information Technology TASC, under JPL contract
  - The seasonal variations are shown in the next slide
    - Availability ranges from 34% to 74%



CFLOS: TMF and PALOMAR Joint Availability 1997-2003

